**Similarity Review**

**General Review of Similarity: http://www.asset.asu.edu/new/mathactive/lessons/170/look.swf**

1) The ratio of the measure of two complementary angles is 2:1. Find both angles.

**Complementary angles add up to 90,**

**Supplementary angles add up to 180.**

**All angles of a triangle add up to 180.**

2) A 60 cm. segment is split into parts that have a ratio of 3:4:8. Find each segment.

**See FEBRUARY 5th on the Wiki for help with #1 or #2**

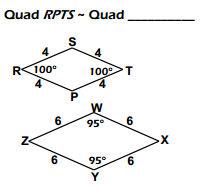
**See 4.1 documents posted to the wiki to practice!**

3) The floor plan of a house is drawn to the scale of ¼ in = 1 ft. The master bedroom measures 3 in. by ¾ in on the blueprints. What are the actual dimensions of the room?

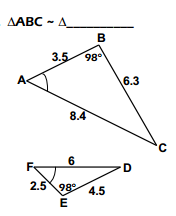
**Click here for an example of setting up proportions with fractions: http://www.purplemath.com/modules/ratio5.htm**

**For more practice: http://www.ixl.com/math/algebra-1/solve-proportions-word-problems**

4) Are the polygons similar? Explain why or why not. If they are, write the similarity statement.



5) Are the triangles similar? Explain why or why not. If they are, write the similarity statement.



**Use for explanation of Theorems of Similar Triangles (AA, SSS, SAS)**

**http://www.regentsprep.org/regents/math/geometry/GP11/LsimilarProof.htm**

**More Practice, do 1-4: http://www.regentsprep.org/regents/math/geometry/GP11/PracSimPfs.htm**

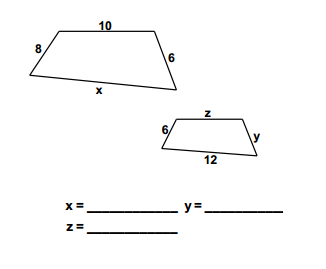
**Practice – Beginner:**

[**http://www.ixl.com/math/geometry/side-lengths-and-angle-measures-in-similar-figures**](http://www.ixl.com/math/geometry/side-lengths-and-angle-measures-in-similar-figures)

**Practice for Quiz:**

**http://www.regentsprep.org/regents/math/geometry/GP11/PracSim.htm**

6) The figures are similar. Solve for the variables.

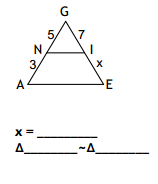
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7) Are two isosceles triangles similar? Why or why not? Use complete sentences.

8) A rope from the tip of a flagpole reaches all the way down to the end of the flagpole shadow, a distance of 10 m. The length of the shadow is 6 m. How tall is the nearby football goal post if it has a shadow of 4 m?

**Practice/Explanation: http://www.asset.asu.edu/new/mathactive/lessons/265/lesson.swf**

9) The triangles are similar. Write the value of x as well as the similarity statement.



**See “Example 3” on page 3**

**See Practice on pages 4-5, ANSWER KEY included!**

**http://faculty.chemeketa.edu/tmerzeni/mathcenter/Math060/Mod4/SimTri.pdf**

10) Solve the equation.  
 **http://cdn.kutasoftware.com/Worksheets/Geo/7-Solving%20Proportions.pdf**